



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

The American Economic Review

VOL. X

MARCH, 1920

No. 1

THE NATURE OF OUR ECONOMIC PROBLEM¹

There can be no question that for the student of economics the war has been a distinct boon. The strain to which our economic system was suddenly subjected has thrown new light on its structure and working, has revealed weaknesses in current economic reasoning, and suggested new evaluations of the forces at work in economic life. Such an experience is bound to add to the body of economic knowledge and suggest new methods of approach to economic problems. That such has been the case there is abundant evidence in the papers and discussions at our annual meetings.

Some economists, indeed, seem to have lost faith in the general validity of the principles of economic science as it has been gradually built up since the time of Adam Smith, to believe that it must be in large measure discarded and an effort made to build on new foundations. There are various reasons for this feeling: the failure of economists to predict accurately the effect of the war upon the course of economic events; the progress made in the study of psychology and its bearing upon the understanding of the motives of human action; the feeling that economic reasoning has been based upon the assumption of the permanence of existing institutions, failing to recognize both that these institutions are subject to change and that they are themselves the controlling factors in economic life and should therefore furnish the main body of material for economic science. None of these criticisms is new but the proceedings of our recent meetings show that they are being urged with special force at the present time.

While no economist would for a moment suggest that his science has reached, or ever will reach, its final form, while the experience through which we are passing and the criticisms to which reference has been made may contain contributions of great value to its progress, it may be questioned whether they are as destructive in their effect as some would appear to believe. Prediction is the severest test to which our knowledge can be put. It is possible

¹ Presidential address delivered at the Thirty-second Annual Meeting of the American Economic Association held in Chicago, December 29, 1919.

only when the forces at work are few and their action thoroughly understood, *i.e.*, within a narrow range of the phenomena of the external world. It is and always must be extremely uncertain in the field of human action where the forces at work are indefinitely numerous and but partially understood.

It is true that many economists as well as others underestimated the reserve labor power which modern nations can call into action and the extent to which they can readjust their economic machinery when the spirit of self-sacrifice and patriotic enthusiasm has been strongly awakened among their peoples, and that they therefore predicted that financial and economic exhaustion would end the war sooner than it did. But Europe was practically at the end of its resources, financial and economic, when the war closed. Fortunately the resources of our own country, when under these conditions they were thrown into the scale, turned the balance decisively and we were not called upon to undergo the test of endurance.

It is true that economists for the same reasons and because they failed to make proper allowance for the temporary effects of inflation, the influence of the newly established federal reserve system, and the possibilities of organized appeals to patriotism, predicted a rise in the rate of interest earlier than it actually occurred in this country, but they were right in their analysis of the fundamental influences at work. The rise has begun in the case of long-time investments, although in the case of short-time loans it is still retarded by the increase in our facilities for discount due to the establishment of the federal reserve system, the great importation of gold during the early years of the war, and the creation of some 25 billions of new securities in the form of public debt which have been made available as collateral for loans at low rates of interest. But even under these conditions the capacity of banks to loan is not inexhaustible and there are indications that this fact is beginning to be realized.

In 1914 I suppose practically all economists would have agreed that a war such as we have been through accompanied by a great expansion of money and credits and the destruction of wealth would cause a rise in prices to be followed by a fall after the close of the war. As a matter of fact, prices have continued to rise and today, in the light of experience with new forces, brought into operation by the war itself, many seem to doubt whether the fall will come. I venture to predict that here too, unless there is to

be a permanent decrease of production or the abandonment of all attempt by the world at large to escape from a depreciated paper basis, the error of the economists of 1914 will prove to be in the time required for fundamental economic forces to work out their result and not in the ultimate result itself. The influences which retard the fall in prices are the same influences which retard the rise of interest rates. When these influences are exhausted and the fall in prices occurs, it may also be found that what we might term the real interest rates, the burden imposed upon the borrower, the per cent on value actually received which he has contracted to repay, have risen more rapidly than nominal rates.

In the face of what I have said concerning the danger of prophecy, and of what seems to be the tendency of events at the moment, I will venture one more prediction strictly in accord with the current theory of economics. As a result of the war the United States has changed from a debtor to a creditor nation and bids fair to again take its place in the ocean carrying trade. For nearly fifty years we have had a so-called favorable balance of trade which has been tremendously increased by the war.

The permanent as distinguished from the temporary influences set in operation by the war are working, however, towards an increase of imports relatively to exports. We cannot expect permanently to maintain the great excess of exports over imports which has characterized our commerce since 1873. This readjustment of our trade balance may be temporarily modified and postponed by continued grants of foreign credits, by investments in foreign securities, and large expenditures by American travelers abroad. It is bound to come in the end. I make no predictions as to the time involved.

But if the war has made clear that economic science has not yet reached a stage of completeness which affords a secure basis for prophecy, so far at least as the time required for its fulfilment is concerned, it has without question confirmed the truth of certain fundamental facts and principles which lie at the basis of the current teaching of economics. Nothing could have brought out more clearly than did the war the truth, taught in every class in elementary economics, that the fundamental economic facts and processes are the same under our highly organized industrial system as in the most primitive community, that the measure of man's economic power is his ability to produce the goods which he needs,

and that the elaborate system of exchange and finance which has been built up is but a piece of mechanism for the furtherance of this end.

On the basis of our war experience it is easy to make clear that our power of production is limited; that if we would increase the production of certain goods, we must economize our consumption of others; that economy in consumption, saving, is the essential condition of the creation of capital; that war finance is the placing of the labor and capital of the country at the disposal of the government; that financial operations are not an independent means, but merely the mechanism for accomplishing this purpose; and that the slogan, "business as usual," in the face of a great national emergency which diminishes our labor force and requires the diversion of labor into new lines of industry is an evident fallacy.

On the whole, economists need not be discouraged by results of the test to which generally accepted principles of economics have been subjected by the war.

It is certain that we have much to learn concerning the influences which govern human action, but there seems no reason to believe that we have erred in assuming that laborers prefer the job that yields the highest pay; that sellers desire to sell in the dearest and buyers to buy in the cheapest market; that the organizers of business seek the industries which promise the largest returns over expenses of production; that men desire to escape, if possible, the competition of others supplying or consuming like goods and services; that the utilization of limited natural resources is subject to the law of diminishing returns; or that goods or services are valued on the basis of their marginal utilities.

So long as these assumptions remain true, and men are allowed free choice of occupations and left to determine their relations to each other by mutual agreement among themselves, the outline of the theory of exchange and distribution will remain what it is although additional knowledge will enable us to fill in the outline more completely than is now possible.

Our social institutions are subject to change and these changes bring changes in the structure and working of our economic system. It is of great importance to understand the course and effects of such changes, but it is equally important to understand the working of the economic system under the institutions that exist. Except for considerations of stability and uniformity in our economic nomenclature it does not seem to be of vital impor-

tance whether we designate as economic theory one or the other body of knowledge or the two combined.

There remain many tasks for the student of economic theory, but I doubt whether as a result of the experience of the war, or of the progress which has been made in other branches of knowledge, he is called upon to tear down the structure which has been gradually built up during the last one hundred and fifty years and begin anew. The great problem which faces us today is not the problem of reconstructing economic theory, but the problem of adequately developing the art of economics or of what may perhaps be termed economic engineering.

It is a familiar fact that the economic system which grew out of the Industrial Revolution contains elements of great strength combined with elements of serious weakness. No one can deny that under this system remarkable results have been achieved in extending the industrial area utilized by people of European origin, in supplying the world with efficient instruments of production, and thereby enormously increasing productive power in the aggregate.

The population of Europe in the middle of the eighteenth century is estimated at 130 millions. At the outbreak of the war the same region supported over 450 millions in a condition of individual well-being superior to that of the earlier period, while over 125 millions had been added to people of European descent living in other portions of the globe. In large measure this achievement must be attributed to the progress of physical science, but we can easily pick out elements in our social and political institutions to which credit is also due.

The principle of individual responsibility of each man for the support of himself and his family has exerted a force of tremendous power, compelling to work and tending to preserve a balance between earning power and the growth of population. The system of free choice of occupation, combined with freedom of contract and private property, including the right of inheritance and bequest, while it has doubtless been accompanied by great waste, and produced great inequalities in the distribution of wealth, has also offered tremendous inducements, not to those confined, by their lack of initiative or the limitation of their opportunities, to manual labor, but to those who could succeed in the organization and management of industry. These are strong points in an economic system and are not to be lightly discarded.

There are equally evident weaknesses; the waste involved in competition; the inequality of opportunity and bargaining power, due to the unequal distribution of wealth, which tends to the formation of economic classes and leaves potential capacity undeveloped; the conflict over the distribution of the product of industry and the consequent sense of opposition of interests between those upon whose hearty coöperation the efficiency of industry depends; the opportunity to gain wealth through the suppression of competition and the establishing of monopoly rather than by economic service; the more or less haphazard character of our industrial adjustments, involving waste and giving rise to alternating periods of prosperity and depression; the lack of motive in the present generation for safeguarding the interests of future generations; this is but a partial list of weaknesses long recognized.

That much has been done to eliminate these weaknesses and mitigate their evil results I have no thought of denying, but, unfortunately or not, neither individuals nor nations are inclined to face the serious problems of life until they are forced upon them; and it may be truly said that those who have had a controlling voice in our industrial affairs and have prospered most under the existing system have been content to let matters drift so far as the most serious problems of industrial organization are concerned.

There is nothing new in the fact that great masses of men in all countries are dissatisfied with the structure and working of the existing economic system; what is new, what the experience of the war has made clear, is that with the extension of the suffrage, education, and organization, these masses have acquired a definiteness of purpose and a power which compels a thoroughgoing consideration and possible reconstruction of our industrial system, if its stability is to be preserved.

Amid the flood of radical proposals which abound in a period of world disorganization such as the present it is doubtless easy to exaggerate the strength of the tendency to fundamental changes in our social system. Those who are agitating for change are articulate and insistent, but it is difficult to estimate the power by which they are backed in comparison with the inertia of the less articulate masses of the population. It would be foolish, however, to close our eyes to the possibility of radical changes in our industrial structure. Our economic system is exempt from change

no more than our political system. The political structure of the western world has undergone radical changes during the last hundred years and it is clear that democracy carries with it the possibility of radical changes in industrial structure, brought about through legal procedure. We are equally blind if we fail to see that the hundred years which have placed political power in the hands of the masses of the population have also changed in their favor the balance of industrial power. These changes clearly foreshadow changes in the structure of our industrial system. The question is as to the lines which such changes must follow if they are to be constructive rather than destructive and accomplish their purpose of improving the economic condition of the masses of the people.

Time is lacking, even had I the ability, to outline in detail the course which we should follow in our industrial readjustments. My purpose is simply to call attention to certain facts which must be recognized if we are to realize the true nature of our problem and thus avoid the mistakes and disappointment which will follow attempts to solve it by methods foredoomed to failure.

There has been a general inclination, evident even in the case of some economists and sociologists, to assume that the problem of the production of wealth has been solved by the introduction of power machinery and that the only problem which remains is the problem of distribution. This is due I believe to an exaggerated estimate of the increase of productive power based on a superficial examination of the facts and to a failure to recognize that the enormous increase in aggregate productive power, which has undoubtedly taken place, has to a considerable extent been absorbed in the support of a population increasing far more rapidly than at any other period of the world's history, far more rapidly in fact than under any conceivable condition it can continue to increase.

The tendency to overestimate the increase in per capita productive power during the last hundred and fifty years results from concentrating our attention on the more obvious and overlooking the less obvious facts in the changes which have taken place.

We compare the quantity of cloth turned out in a modern cotton mill with the quantity which could be turned out by the same number of laborers using the spinning wheel and the hand loom, forgetting the labor which has gone into the construction of the mill and its equipment and the fact that a large part of the labor

required for the production of cloth is employed on the plantation, where the increase of productive power has been comparatively slight. We compare the cost of moving a ton of freight by railway and by wagon, but we forget that owing to the growth and expansion of population and to its congestion in limited areas, devoted to manufactures and trade, goods must be carried much longer distances than a century ago. We forget that the increase in productive power has not been uniform throughout the whole field of industry, that it has been greatest in manufactures, mining, and transportation, and least in agriculture and the handling of goods in trade, in which branches of industry is employed a large part of the labor required in the production of the necessities of life. Furthermore, our industrial development, accompanied as it has been by the growth of city life, has imposed upon us the necessity of providing new forms of wealth and services not required by a less densely settled population, such as paved streets, sewage systems, costly plants for supplying water, police service, and protection from fire, and has immensely increased the difficulty of providing adequate housing.

The instances of increased power of production are striking and appeal to the imagination. The offsets are not so obvious and are apt to be overlooked.

Furthermore the great mass of the population which supplies the manual labor factor in production has not benefited, and in the nature of the case could not benefit, to the full extent of the increase in per capita production which has taken place. This increase has been mainly due to invention, organization, and the increase in the per capita equipment of capital, none of which would have been forthcoming in anything like the quantity actually available except on condition of receiving a share in the product. No matter what changes we may make in our industrial organization, we must provide a return to these factors of production. We may cut down their allowance but we cannot abolish it except at the cost of industrial progress. That there has been a substantial increase in real wages during the last hundred years, with corresponding improvement in the living conditions of the mass of the population, there can be no question, although it has probably been less, in this country at least, than would be indicated by a comparison between money wages and average prices. The major portion of the laborers' expenses are for food and rent. Rent is not included in the general price average and has un-

doubtedly greatly increased for city laborers, while food has risen relatively to the average.

In certain directions even the lower paid portions of the manual laboring class have made great gains. Their freedom of movement and communication have been immensely increased. They can acquire the foundations of an education. Through the unification of the industrial system of the world they have escaped the danger of recurring periods of extreme hardship due to local scarcity. They are offered a much larger variety of goods from which to choose and enjoy certain comforts and luxuries unknown a century and a half ago. But the increase in their productive power measured in the goods essential to life has been comparatively small.

The rapid expansion of the industry of the world has been made possible by an apparently inexhaustible supply of low paid labor, constantly keeping pace with the demand, with the result that a large part of the population of even the wealthiest countries is living close to the margin of existence. Owing to their number and the lack of individual efficiency their marginal productivity has been low.

So far as this low marginal productivity is attributable to excessive numbers, conditions have been temporarily, at least, altered by the war. There are probably ten million fewer laborers in the western industrial world today than there would have been if there had been no war. This condition, particularly if it is accompanied by an increase in individual efficiency, a rapid accumulation of capital, and a stimulus to invention, offers the possibility of the creation of a new standard of life sufficiently strong to control the birth rate and a consequent permanent increase in the marginal productivity and earning power of manual laborers. As yet, however, this is only a possibility.

Apparently before the recent fall in the value of money only about 4 per cent of the families in this country received an income in excess of \$3,000 and seven tenths of one per cent an income in excess of \$10,000.

The success of this small minority and the very large incomes received by a very few have raised the standard of what is regarded as a decent and healthful condition of life, have emphasized inequality and bred unrest and discontent. More than this, it has set standards of extravagant expenditure all too readily, even if naturally, imitated by the manual laborer whenever his

earnings exceed what is required for the necessities of life. But the fact seems to be that the productive power of the nation, offset as it is by waste and misdirected energy, is still insufficient to provide very much more than the means of a bare livelihood for all, even if income were equally distributed.

We must admit that the evidence on this point is not decisive, for our knowledge of the amount and distribution of the national income is far from complete. It is sufficient, however, for estimates in the approximate accuracy of which we may place considerable confidence. The most carefully worked out estimates are those made by King for the United States and Bowley for the United Kingdom, both for the period a few years preceding the war. The results reached in these two independent investigations tend to create confidence in the substantial accuracy of each, and both confirm the statements I have made.

King estimated the annual product of the United States at \$30,530,000,000, a per capita product of \$332. Bowley estimated the per capita product of home industry in the United Kingdom at about \$220, which would be increased to \$240 if we include the earnings of British investments in foreign countries. The whole of this product is, of course, not available for living expenses. We must deduct the savings required for the maintenance and development of industry and such portion of taxes as is not shifted to the consumer and thus included in living expenses. King estimated the annual savings in the United States at two billions, using as a basis the increase in the census figures of wealth between 1900 and 1904, the latest figures then available. The figures for 1912 showed that between 1904 and 1912 the increase had been at the rate of four billions. Deducting this sum and an allowance for taxes from the total would leave about 26 billions available for living expenses. This sum evenly distributed with due allowance for age distribution, according to the scale usually employed, would yield about \$1300 for a family of father, mother, and three children under fifteen years of age. According to Chapin's estimate of 1907 it took \$900 to provide for the physical necessities of a healthful life for such a family in New York.

To quote his exact words:

It seems safe to conclude from all the data we have been considering that an income of under \$800 is not enough to permit the maintenance of a normal standard. . . . An examination of the items of the budget shows that the families having from \$900 to \$1,000 a year are able, in

general, to get food enough to keep soul and body together, and clothing and shelter enough to meet the most urgent demands of decency.

Apparently even in the wealthiest country in the world the annual product is not sufficient to provide more than a very moderate surplus above what is required for the physical necessities of its people as a whole.

According to King's estimate there were in 1910 over nine million families, excluding single individuals without dependents, with incomes of less than \$900, about one half of the total of such families in the country. As already stated, the families with incomes in excess of \$3,000 constituted not more than 4 per cent of the total. From these families must have come the major part of the savings of the nation. If we had taken the whole surplus above \$3,000 from these families, less their savings, and distributed it among the poorest classes of the population, it might conceivably, for the moment, have established a minimum family income of \$1,000; but it is hardly necessary to argue that no such radical redistribution of income could be accomplished, either through taxation or an increase of wages at the expense of the other factors of production without a falling off in production which would far exceed the sum distributed.

The production of a large portion of the income in excess of \$3,000 per family was undoubtedly due to the efficiency and savings of those into whose hands it passed, was an essential factor in stimulating their efficiency and savings, and could by no process of reasoning be attributed to those among whom we have assumed it to be distributed.

I am, of course, aware that these figures do not apply today. Not only have money values doubled, but war has affected the distribution of the national income probably to the advantage of the well-to-do. Present conditions are, however, abnormal. The war gave a tremendous stimulus to productive energy. We called on hitherto unused labor power and we worked overtime. There is bound to be a reaction from these conditions. It is still too early to estimate what the permanent effect of the war will be, but there can hardly be said to be as yet clear evidences of permanent increase in per capita production.

I do not wish to minimize the importance of the problem of distribution or the evil of extravagant expenditure. The smaller the aggregate income, the more important its equitable distribution and the more reprehensible extravagant and wasteful expenditure.

It goes without saying that we should endeavor to cut off every source of income which corresponds to no benefits received by society, being careful not to overlook the less obvious ways in which benefit may be derived; but it is clear that if the figures which I have used at all approximate the truth the remedy for the unsatisfactory conditions of life of the poorer portion of the population of even the wealthiest countries must be chiefly sought, not in a forced redistribution of national income but in the increase of their marginal productivity, brought about by a diminution in their number, relatively to the other factors of production, an increase in their efficiency, and in a more intelligent use of the wealth available.

In so far as a more equal distribution of income is effected by methods, and the opportunities which it offers used in ways, which increase the efficiency of those who benefit by it, without corresponding loss of efficiency elsewhere, it is a distinct gain. Otherwise it is merely a palliative, and, as the figures which I have used indicate, a palliative of comparatively small potency. Palliatives may be useful, even necessary, if they do not undermine the constitution, but they are not a cure.

Our problem is not merely a problem in distribution. It is far more extensive and fundamental. It is a great constructive problem in social engineering, comprising many elements, and must be attacked along many lines of approach.

We may distinguish at least five phases.

1. The problem of individual efficiency. This is primarily a problem of health and education in the broadest sense of the term, involving not only our school system but the continuation of training within the shop and on the farm. Our industrial development has been so rapid that our educational system has failed to keep pace with it.

2. The problem of industrial organization of the readjustment of our industrial mechanism in a manner to eliminate waste of energy and goods, while preserving in their full strength the motive forces upon which economic progress depends.

It is in connection with this element of the problem that the economist can render his greatest service. The chief difficulty which faces him is the incompleteness of his knowledge of the actual working of the existing system. A vast mass of information has been gathered in connection with the administration of our war activities. It is of the first importance that this should

be made available and systematically utilized. In connection with the administration of the income and excess profits taxes there is also being gathered information which promises to be of great value. But we must go farther than this. In coöperation with the statistician we must work out a more adequate and better co-ordinated statistical service, and those in whose hands lie the control and direction of our industrial system must furnish much more complete information concerning the operation and results of the enterprise which they direct. We now require such information based on prescribed and uniform systems of accounting from certain enterprises regarded as quasi-public in character. The field covered by such reports, as well as their scope, must be gradually extended. Information regularly collected over a series of years is far more valuable than that furnished by spasmodic investigations of particular industries, conditions in which, for one reason or another, attract public attention at the moment.

If there is one fact rather than another which the war has made clear, it is the fact of the solidarity of our industrial system. Industry has become socialized, not as the result of any conscious purpose but by the working of economic forces. As it is organized today, there is really no such thing as private industry in the sense in which that term has been used in the past. What we call private industry is privately managed public industry and if that system is to endure those who hold positions of responsible control must be willing to render a full and regular account of their stewardship.

We need also special investigations which will be valuable in proportion as they are scientifically conceived and carried out and are directed to the solution of specific problems.

3. The problem of securing harmonious and effective coöperation between the factors which make up the individual industrial establishment.

4. The problem of maintaining such a balance of the factors of production that the marginal productivity of no class of the population need fall below what is required for the maintenance of a healthful existence.

In a country like ours, subject to a large immigration, this is partly a problem of statesmanship, partly a problem of parental responsibility.

5. The problem of the rational use of the wealth we are able

to command, again an educational problem, and one of the greatest difficulty.

The third phase of the problem, that of securing harmonious and effective coöperation between the factors which make up the individual industrial establishment, is, I take it, the constructive aspect of what we term the labor problem.

The labor problem has in the past been commonly discussed as a problem of distribution and of the control of the conditions under which laborers work. The reasons why the problem has assumed this form are evident. The industrial and legal system which grew out of the Industrial Revolution place authority and responsibility in the management of industry, and offer the reward of success, to the entrepreneur class, closely associated with the capitalist class. The laborer as a human being is left outside the industrial scheme. He has neither authority, responsibility, nor hope of reward beyond his daily wage and the possibility, open to very few, of escape from his class into the entrepreneur class. With the rapid increase in the number of laborers made possible by the increase in aggregate productive power, the increase in the size of business units, the lack of continuity in employment, due to the lack of adjustment in our industrial system, and the necessity of making an immediate sale of his labor power, the laborer has become as an individual ever more insignificant.

It is inevitable under these conditions that laborers should organize, not as a constituent element within the system, but for the purpose of developing a fighting power which shall enable them to force from the system an increase in the price paid for their services, a shortening of their hours of labor, and an improvement in the conditions under which they work.

That good has come from the increase of power which laborers have secured through organization, that it has forced a more equitable distribution of income than would otherwise have existed, that it has improved the conditions under which the masses of men labor, that it has forced more efficient methods of production on the employer, and that experience in the work of organization and negotiation has exercised a valuable educational influence on the laborer himself cannot be denied.

The fundamental weakness from the point of view of production has, however, continued to exist. Those who control one of the essential factors of production remain outside the system as a mechanism for the production of wealth, organized not for co-

operation in the increase of the common product but for the improvement of their own condition regardless of or even at the expense of such increase, for which they feel no sense of responsibility. Where harmony and coöperation are essential for production, disharmony and conflict prevail, a conflict which, with the growing complexity of our industrial mechanism and the growing strength of labor organizations, threatens the stability of our whole economic system.

To state the case is to suggest the remedy. Laborers must be incorporated into the industrial scheme. They must be given the voice and responsibility in management, and the hope of reward for successful effort, which they have hitherto lacked. Harmony between men engaged in a common enterprise depends upon personal contact and conference with full knowledge of the facts by all concerned, a willingness to sacrifice momentary personal advantage to the promotion of the common interest and to submit to discipline. Interest and a feeling of responsibility exist only with a sense of power, of having a voice in the determination of the methods employed to bring about the result achieved.

These statements may indicate a very inadequate social psychology. Our social psychologists can fill out the picture and teach us the nature of the human instincts with which we have to deal. Our efficiency engineers can instruct us in the methods of the organization of work and the adjustment of earnings; but they must study their problem from the point of view not merely of profits but with consideration of the permanent well-being and harmony of interest of all concerned.

This incorporation of laborers must take place first in each industrial unit. The laborer's sense of responsibility and interest, if it is to be a vital force, must attach itself to the establishment in which he works. There will always remain, however, questions affecting whole branches of industry which must be settled by conference between the representatives of the employers and employees in the industry as a whole, and questions affecting the relations between different branches of industry calling for conference between the representatives of these classes in the nation at large.

We accomplished much in the way of temporary adjustments along these lines under the impulse of the war spirit. The peace problem is more difficult, but if our peace spirit is equal to our war spirit it is not insoluble.

Laborers cannot be expected to give up the advantages of or-

ganization and collective bargaining won through long years of struggle, but they must be educated to realize that only through coöperation with the employer in the increase of production can laborers as a body acquire their maximum earning power, that any advantage obtained by a special group in the form of higher wages accompanied by decreased per capita production and the spreading out of work is obtained at the expense of the rest of the community and is negated by like success on the part of other groups.

Employers cannot be expected to give up their responsibility for management and the protection of the property interests which they control, but they must be educated to realize the lesson emphasized by the war, that there is really no such thing as private industry, that, in the last analysis, they represent the nation and that their tenure depends upon their ability to organize effectively the nation's productive resources and maintain harmonious relations between those who must coöperate in industry. Success in this task and not profits, except as they measure such success, is the true measure of their efficiency. It would be foolish to begrudge large rewards to those who succeed, but the task must be performed or other forms of industrial organization will be tried. Until we can develop an intelligent public opinion on these fundamental questions there is little hope of harmony in our industrial life.

The alternative is a continuation of the struggle for control which contains little of promise. If we have erred in the past in offering the laborer nothing but wages and giving him no voice or responsibility in the organization and operation of the industry in which he is engaged, there seems to be no reason to believe that we should fare better if we put labor in absolute control, placing capital and organizing and managing ability on a fixed stipend, but denying them an effective voice in management and control. I doubt whether human nature differs essentially as between economic classes, whether we can expect better results from the dominance of one class than of another, and whether we can eliminate industrial conflict by eliminating the voice and the responsibility of the capitalist and the entrepreneur in industry. The conflict between classes would be replaced by struggle between different groups of laborers. This struggle is suppressed while the laborers combine to fight the employer, but there is plenty of evidence that it exists.

Nor does the success so far achieved in the field of business administration by officers directly or indirectly dependent upon popular vote create confidence that such a change in the control of industry would contribute to efficiency or progress. If one party or the other must exercise exclusive control, the weight of argument is in favor of the class which has a property interest at stake.

In the past, progress in the field of politics and industry has usually come through conflict of opposing interests. Are we yet ready to substitute conference and cooperation in seeking the solution which promises most for the common interests of all? It seemed for a moment at the close of the war that we were, but recent events can hardly be described as encouraging.

In an industrial society based on division of occupations, it is impossible to secure harmony of immediate interests between economic classes, whether seller and buyer, borrower and lender, or employer and employee, just as it is impossible to secure harmony of immediate interests between nations. Such harmony simply does not exist. It is not impossible to secure a working basis for coöperative action recognized by all concerned as based on reasonable principles and promising to each better results in the long run than could be obtained through conflict. All that is necessary is a knowledge of the facts involved and the dominance of the spirit of reason and far-sightedness.

There are many problems of great importance connected with the coördination and smooth-working of our extremely complex economic system and with the distribution of its burdens and rewards, but the fundamental problem is still what it always has been, the problem of increased per capita production and of the rational and economical use of wealth, not a temporary increase brought about under conditions which in the long run diminish productive power and involve the sacrifice of things more important than wealth, but a permanent increase, resting on individual efficiency, effective coöperation, and the adjustment of the number of the population to the supply of natural resources upon which it must in the last analysis subsist.

HENRY B. GARDNER.

Brown University.